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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,270	05/25/2006	Hiroyuki Takebe	1254-03141PUS1	5965
2292 7590 01/31/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER HSIEH, PING Y	
			ART UNIT 2618	PAPER NUMBER
			NOTIFICATION DATE 01/31/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/580,270

Applicant(s)

TAKEBE, HIROYUKI

Examiner

Ping Y. Hsieh

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/25/06, 8/1/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 recites the limitation "said opposing portions" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2 and 11-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueda (U.S. PATENT NO. 7,269,440).

-Regarding claim 1, Ueda discloses a folding cellular wireless unit (**as disclosed in fig. 4-6**) comprising a first casing containing a first circuit member (**first printed substrate 37a, fig. 6**), a second casing containing a second circuit member (**second printed substrate 37b, fig. 6**), an antenna disposed at one end of said first casing (**antenna 36, fig. 6**), and a hinge portion via which the other end of said first casing and one end of said second casing are connected

such that said first casing and said second casing can be rotated relative to each other in a hinged manner (**hinge 33 as disclosed in fig. 4 and further disclosed in col. 7 lines 43-52**), said folding cellular wireless unit further comprising: a first connecting conductor connected to said first circuit member at said other end thereof (**the base contact 61 as disclosed in fig. 6 and further disclosed in col. 8 lines 29-37**), and a second connecting conductor connected to said second circuit member at said one end thereof (**the base contact 71 as disclosed in fig. 6 and further disclosed in col. 8 lines 38-46**), wherein said first connecting conductor and said second connecting conductor are disposed at least partly opposite to each other at a certain interval (**as disclosed in fig. 6**).

-Regarding claim 2, Ueda further discloses a magnetic member disposed in proximity to the electric connecting means between said first circuit member and said second circuit member (**cable 47 as disclosed in fig. 6 and further disclosed in col. 8 lines 50-57**).

-Regarding claim 11, Ueda discloses a rotary cellular wireless unit (**as disclosed in fig. 4-6**) comprising a first casing containing a first circuit member (**first printed substrate 37a, fig. 6**), a second casing containing a second circuit member (**second printed substrate 37b, fig. 6**), an antenna disposed on one end of said first casing (**antenna 36, fig. 6**), and a connecting portion via which the other end of said first casing and one end of said second casing are connected (**cable 47 as disclosed in fig. 6 and further disclosed in col. 8 lines 50-57**) such that said first and said second casings are rotatable while they

maintain a substantially parallel relationship **(as disclosed in fig. 4-6)**, said cellular wireless unit further comprising: a first connecting conductor connected to said first circuit member at said other end thereof **(the base contact 61 as disclosed in fig. 6 and further disclosed in col. 8 lines 29-37)**, and a second connecting conductor connected to said second circuit member at said one end thereof **(the base contact 71 as disclosed in fig. 6 and further disclosed in col. 8 lines 38-46)**, wherein said first connecting conductor and said second connecting conductor are disposed at least partly opposite to each other at a certain interval **(as disclosed in fig. 6)**.

-Regarding claim 12, Ueda further discloses the state of the opposed arrangement varies depending on the rotation **(as disclosed in fig. 4-6)**.

-Regarding claim 13, Ueda further discloses as said casings are rotated relative to each other in a hinged manner **(first and second bodies 37a and 37b are foldable about the hinge 33 as disclosed in fig. 6 and further disclosed in col. 10 lines 21-26)**, the effective casing length relative to said antenna is adjusted in a direction such that the drop of antenna efficiency is prevented **(ground length L1 and L2 as disclosed in fig. 6 and further disclosed in col. 10 lines 7-34)**.

-Regarding claim 14, Ueda discloses a folding cellular phone **(as disclosed in fig. 4-6)** comprising a first casing containing a first circuit member **(first printed substrate 37a, fig. 6)**, a second casing containing a second circuit member **(second printed substrate 37b, fig. 6)**, and an antenna disposed at

one end of said first casing (**antenna 36, fig. 6**), said cellular wireless unit further comprising: an adjustment mechanism for adjusting the effective casing length relative to said antenna in a direction such that the drop in antenna efficiency can be prevented (**ground length L1 and L2 as disclosed in fig. 6 and further disclosed in col. 10 lines 18-34**), depending on the change in the positional relationship between said first casing and said second casing (**first and second bodies 37a and 37b are foldable about the hinge 33 as disclosed in fig. 6 and further disclosed in col. 10 lines 21-26**).

-Regarding claim 15, Ueda discloses a cellular wireless unit (**as disclosed in fig. 4-6**) comprising an antenna mounted at one end of a casing (**antenna 36, fig. 6**), wherein said casing has two different figures, namely, a first figure (**first printed substrate 37a, fig. 6**) and a second figure (**second printed substrate 37b, fig. 6**), said cellular wireless unit further comprising an adjustment mechanism for adjusting the effective antenna length relative to said antenna in a direction such that the drop in antenna efficiency can be prevented depending on the change in the figure of said casing (**ground length L1 and L2 as disclosed in fig. 6 and further disclosed in col. 10 lines 18-34; and first and second bodies 37a and 37b are foldable about the hinge 33 as disclosed in fig. 6 and further disclosed in col. 10 lines 21-26**).

-Regarding claim 16, Ueda discloses a folding cellular wireless unit (**as disclosed in fig. 4-6**) comprising a first casing containing a first circuit member (**first printed substrate 37a, fig. 6**), a second casing containing a second circuit

member (**second printed substrate 37b, fig. 6**), and an antenna disposed at one end of said first casing (**antenna 36, fig. 6**), said cellular wireless unit further comprising: an adjustment mechanism for adjusting the effective casing length relative to said antenna in a direction such that the drop in antenna efficiency can be prevented, depending on a change in the positional relationship between said first casing and said second casing (**ground length L1 and L2 as disclosed in fig. 6 and further disclosed in col. 10 lines 18-34; and first and second bodies 37a and 37b are foldable about the hinge 33 as disclosed in fig. 6 and further disclosed in col. 10 lines 21-26**).

-Regarding claim 17, Ueda discloses a rotary cellular wireless unit (**as disclosed in fig. 4-6**) comprising a first casing containing a first circuit member (**first printed substrate 37a, fig. 6**), a second casing containing a second circuit member (**second printed substrate 37b, fig. 6**), and an antenna disposed at one end of said first casing (**antenna 36, fig. 6**), wherein said first casing and said second casing can be rotated **as disclosed in fig. 4-6**), said rotary cellular wireless unit further comprising: an adjustment mechanism for adjusting the effective casing length relative to said antenna in a direction such that the drop in antenna efficiency can be prevented, depending on a change in the positional relationship between said first casing and said second casing (**ground length L1 and L2 as disclosed in fig. 6 and further disclosed in col. 10 lines 18-34; and first and second bodies 37a and 37b are foldable about the hinge 33 as disclosed in fig. 6 and further disclosed in col. 10 lines 21-26**).

-Regarding claim 18, Ueda discloses a slidable cellular wireless unit **(as disclosed in fig. 8A-8B)** comprising a first casing containing a first circuit member **(principal body 51, fig. 8A-8B)**, a second casing containing a second circuit member **(slide body 52, fig. 8A-8B)**, and an antenna disposed at one end of said first casing **(antenna 53, fig. 8A-8B)**, wherein said first casing and said second casing are slidably movable in the direction in which said antenna extends **(the slide body is slid relative to the principal body 51 in a direction R as disclosed in col. 10 lines 59-63 and fig. 8A-8B)**, said cellular wireless unit further comprising: an adjustment mechanism for adjusting the effective casing length relative to said antenna in a direction such that the drop in antenna efficiency can be prevented, depending on a change in the positional relationship between said first casing and said second casing **(ground length L1 and L2 as disclosed in fig. 6 and further disclosed in col. 10 lines 18-34; and first and second bodies 37a and 37b are foldable about the hinge 33 as disclosed in fig. 8A-8B and further disclosed in col. 10 lines 21-26 and col. 11 lines 1-14)**.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



6. Claims 3-10, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda (U.S. PATENT NO. 7,269,440) in view of Desclos et al. (U.S. PATENT NO. 7,310,536).

-Regarding claims 3 and 19, Ueda discloses all the limitations as claimed in claim 1. However, Ueda fails to disclose said first and said second connecting conductors include a first and a second opposing portion, respectively, that are disposed opposite to each other at said hinge portion.

Desclos et al. disclose a first and a second opposing portion, respectively, that are disposed opposite to each other at said hinge portion **(coupling portions 20c and 20d are disposed opposite to each other at hinge 23 as disclosed in fig. 5a-5c).**

Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the cable 47 as disclosed by Ueda to be replaced with the coupling portions 20c, 20d and hinge 23 as disclosed by Desclos et al. One is motivated as such in order to reduce the loading and degradation of signals received or sent by the antenna.

-Regarding claim 4, the combination further discloses an insulator is disposed between said first opposing portion and said second opposing portion **(Desclos et al., coupling portions 20c and 20d are electrically isolated from the hinge 23 and portions 20c and 20d are disposed about hinge 23 such that portions 20c and 20d are linearly separated by a distance that defines a gap as disclosed in fig. 5a-5c and further disclosed in col. 6 lines 54-60).**

-Regarding claims 5 and 20, the combination further discloses said first and said second opposing portions are disposed such that a direction normal thereto is substantially parallel to the direction in which said hinge portion extends, said first and said second opposing portions having a ring-shape portion or a part thereof with an opening in which a pin constituting said hinge portion is inserted **(Desclos et al., as disclosed in fig. 5a-5c).**

-Regarding claim 6, the combination further discloses said first and said second connecting conductors are disposed at both ends of said hinge portion **(Desclos et al., as disclosed in fig. 5a-5c).**

-Regarding claim 7, the combination further discloses the connecting conductors are opposed to each other at different intervals at said ends **(Desclos et al., as disclosed in fig. 5a-5c).**

-Regarding claim 8, the combination further discloses the connecting conductors are opposed to each other with different areas at said ends **(Desclos et al., as disclosed in fig. 5a-5c).**

-Regarding claim 9, the combination further discloses said first and said second opposing portions are disposed such that a direction normal thereto is substantially perpendicular to the direction in which said hinge portion extends **(Desclos et al., as disclosed in fig. 5a-5c).**

-Regarding claim 10, the combination further discloses the area with which said opposing portions are opposed to each other varies depending on the positional relationship between said first casing and said second casing

**(Desclos et al., as disclosed in fig. 5a-5c and further disclosed in col. 7 lines 16-45).**

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kanazawa et al. (U.S. PATENT NO. 7,283,853).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Y. Hsieh whose telephone number is 571-270-3011. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lana Le can be reached on 571-272-7891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in cursive script, appearing to read "Lana L. E.", written in black ink.

1-22-08

LANA LE  
PRIMARY EXAMINER